



Yakima County Water Conservancy Board

128 North Second Street
Yakima, Washington 98901
(509) 574-2650 / Fax (509) 574-2651

RECEIVED

JUL 27 2011

DEPARTMENT OF ECOLOGY - CENTRAL REGIONAL OFFICE

July 7, 2011

Washington State Department of Ecology
Central Region Office
15 West Yakima Avenue, Suite 200
Yakima, Washington 98902

RE: TRANSMITTAL OF REPORT OF EXAMINATION AND RECORD OF DECISION
FOR YAKI-10-03 CITY OF YAKIMA

The Yakima County Water Conservancy Board has reviewed and approved this application in open session on July 7, 2011.

The comment period has closed and no official protests were received in this office.

Enclosed are the Report of Examination and the Record of Decision. All original documents of the file are attached. If you have any questions or concerns, please feel free to contact our office at 509.574.2650.

Sincerely,

Sylvia E. Cervantes

Sylvia E. Cervantes
Clerk of the Board

Cc: w/ enclosure
City of Yakima

Yakima County
WATER CONSERVANCY BOARD
Application for Change/Transfer
Record of Decision

For Ecology Use Only

Received:

RECEIVED

JUL 29 2011

Reviewed by: DEPARTMENT OF ECOLOGY - CENTRAL REGIONAL OFFICE
Date Reviewed: _____

Applicant: City of Yakima/Aboretum

Application Number: YAKI-10-03

This record of decision was made by a majority of the board at an open public meeting of the Yakima County Water Conservancy Board held on July 7, 2011

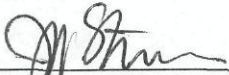
☒ **Approval:**

The Yakima County Water Conservancy Board hereby **grants** conditional approval for the water right transfer described and conditioned within the report of examination on 07-07-11 and submits this record of decision and report of examination to the Department of Ecology for final review.

☐ **Denial:**

The Yakima County Water Conservancy Board hereby **denies** conditional approval for the water right transfer as described within the report of examination on _____ and submits this record of decision to the Department of Ecology for final review.

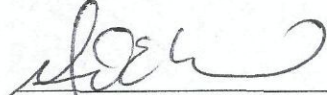
Signed:



Jeff Stevens, Chair
Yakima County Water Conservancy Board

Date: 7-7-2011

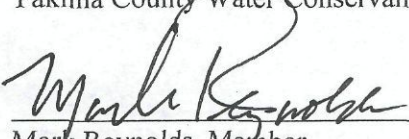
Approve ☒
Deny ☐
Abstain ☐
Recuse ☐



Dave Brown, Member
Yakima County Water Conservancy Board

Date: 7-7-2011

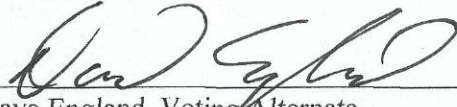
Approve ☐
Deny ☐
Abstain ☐
Recuse ☒



Mark Reynolds, Member
Yakima County Water Conservancy Board

Date: 7-7-2011

Approve ☒
Deny ☐
Abstain ☐
Recuse ☐



Dave England, Voting Alternate
Yakima County Water Conservancy Board

Date: 7-7-2011

Approve ☒
Deny ☐
Abstain ☐
Recuse ☐

Mailed to the Department of Ecology Central Regional Office of Ecology, via certified mail, and other interested parties on 07-08-11.



Yakima County
WATER CONSERVANCY BOARD

Application for Change/Transfer
OF A RIGHT TO THE BENEFICIAL USE OF THE PUBLIC WATERS OF
THE STATE OF WASHINGTON

RECEIVED

JUL 27 2011

DEPARTMENT OF ECOLOGY - CENTRAL REGIONAL OFFICE

Report of Examination

☐ Surface Water ☒ Ground Water

DATE APPLICATION RECEIVED November 2, 2010	WATER RIGHT DOCUMENT NUMBER (i.e., claim, permit, certificate, etc.) G4-23039C	WATER RIGHT PRIORITY DATE June 3, 1974	BOARD-ASSIGNED CHANGE APPLICATION NUMBER YAKI-10-03
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NAME City of Yakima	(CITY) Yakima	(STATE) WA	(ZIP CODE) 98902
ADDRESS (STREET) 2301 Fruitvale Blvd.			

Changes Proposed: ☐ Change purpose ☐ Add purpose ☐ Add irrigated acres ☐ Change point of diversion/withdrawal
☒ Add point of diversion/withdrawal ☐ Change place of use ☐ Other (Temporary, Trust, Interties, etc.)

SEPA

The board has reviewed the provisions of the State Environmental Policy Act of 1971, Chapter 43.21C RCW and the SEPA rules, chapter 197-11 WAC and has determined the application is: ☒ Exempt ☐ Not exempt

BACKGROUND AND DECISION SUMMARY

Existing Right (Tentative Determination)

MAXIMUM CUB FT/ SECOND	MAXIMUM GAL/MINUTE	MAXIMUM ACRE-FT/YR	TYPE OF USE, PERIOD OF USE				
	200	83	Irrigation of 16 acres, April 1 to October 1				
SOURCE Well			TRIBUTARY OF (IF SURFACE WATER)				
AT A POINT LOCATED: PARCEL NO.	¼	¼	SECTION	TOWNSHIP N.	RANGE	WRIA	COUNTY.
191329-11005	NW	NE	29	13	19E	38	Yakima
LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS USED							
That portion of the SE1/4 of the SE1/4 of Section 20, T.13N, R. 19EWM lying westerly of the existing Yakima River Flood Control Dike; Also, beginning 1352.5 feet E of the NW corner of the NE1/4 of Sec 29, T 13N, R 19 EWM; thence S 419.50 feet; thence 15 3/4° E 451 feet; thence S 51 1/4° E 758.5 feet to the S line of the N1/2 of the NW1/4 of said Section 29; thence E along said S line of the N1/2 of NE1/4 to the point where said line intersects with the existing Yakima River Flood Control Dike; thence Northwesterly along the W boundary of the Yakima River Flood Control Dike to the line common to Sections 20 and 29; thence westerly along said section line to the point of beginning. Parcel A: Commencing at Point 900 feet E of the SW corner of the NW1/4 of the NE1/4 of Section 29, T 13, R 19 EWM; thence 454 feet to the true point of beginning; thence N 20 feet; thence W 200 feet; thence N 434 feet; thence E 652.2 feet; thence S 15°45'; E 471 feet; thence W 540 feet to the true point of beginning. Parcel B: Beginning 900 feet E of the SW corner of the NW1/4 of Section 29, T 13N, R 19 EWM; thence E 540 feet; thence N 15°45' W 20 feet; thence S 51°15' E 758.5 feet; thence 1326 feet; more or less to the point of beginning. Parcel C; That part of Lots 1, 2, 11 and 12 of Goodwin's Five Acre Tracts, according to the plat thereof recorded in Volume A of Plats, Page 18, records of Yakima County, Washington, Described as follows: Beginning at a point 1643.7 feet E of the SW corner of the NW1/4 of the NE1/4 of Section 29, T 13N, R 19EWM, running E 323.3 feet to the W bank of the Yakima River; thence running along the W bank of said river downstream S 46°15' E 728 feet; thence running S 30° E 180.7 feet; Thence running W 939.7 feet; thence running N 660 feet to the point of beginning. Also the E half of Lot 4 and all of Lot 3 of Goodwin's Five Acre Tracts according to the plat thereof recorded in Volume A of Plats, Page 18, records of Yakima County, Washington. That portion of Lots 13, 14, 23 and 24, Goodwin's Five Acre Tracts according to the plat thereof recorded in Volume A of Plats, Page 18, records of Yakima County, Washington, lying N and E of the easterly right of way line of State Highway No.3A as acquired by condemnation under Yakima County Superior Court No. 45885. Lots 2, 10 and 11 Goodwin's Five Acre Tracts according to the plat thereof recorded in Volume A of Plats, Page 18, records of Yakima County, Washington, EXCEPT that portion of Lots 2 and 11 lying E of the W line of the property conveyed to Aea D. Holloway by instrument recorded in Volume 61 of Deeds, Page 46, records of Yakima County, Washington, described as follows: Beginning at a point 1643.7 feet E of the SW corner of the NW1/4 of the NE1/4 of Section 29, T 13N, R 19EWM, running E 323.3 feet to the W bank of the Yakima River; thence running along the W bank of said river downstream S 46°15' E 728 feet; thence running S 30° E 180.7 feet; Thence running W 939.7 feet; thence running N 660 feet to the point of beginning. EXCEPT that portion of said Lot 2 lying westerly of the easterly right of way line of Primary State Highway 3, as conveyed by deed recorded in Volume 620 of Deeds, Auditor's File No. 1881267, records of Yakima County, Washington.							
PARCEL NO.	¼	¼	SECTION	TOWNSHIP N.	RANGE,		
191329-11005		NE	29	13	19 EWM		

Proposed Use

MAXIMUM CUB FT/ SECOND	MAXIMUM GAL/MINUTE	MAXIMUM ACRE-FT/YR	TYPE OF USE, PERIOD OF USE				
	118	83	Municipal Water Supply, April 1 to October 1				
SOURCE Well			TRIBUTARY OF (IF SURFACE WATER)				
AT A POINT LOCATED: PARCEL NO.	¼	¼	SECTION	TOWNSHIP N.	RANGE	WRIA	COUNTY.
191329-11005	NW	NE	29	13	19EWM	38	Yakima
AT A POINT LOCATED: PARCEL NO.	¼	¼	SECTION	TOWNSHIP N.	RANGE	WRIA	COUNTY.
191329-11005	SE	NE	29	13	19EWM	38	Yakima
LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS TO BE USED							

That portion of the SE1/4 of the SE1/4 of Section 20, T.13N, R. 19EWM lying westerly of the existing Yakima River Flood Control Dike; Also, beginning 1352.5 feet E of the NW corner of the NE1/4 of Sec 29, T 13N, R 19 EWM; thence S 419.50 feet; thence 15 3/4° E 451 feet; thence S 51 1/4° E 758.5 feet to the S line of the N1/2 of the NW1/4 of said Section 29; thence E along said S line of the N1/2 of NE1/4 to the point where said line intersects with the existing Yakima River Flood Control Dike; thence Northwesterly along the W boundary of the Yakima River Flood Control Dike to the line common to Sections 20 and 29; thence westerly along said section line to the point of beginning. Parcel A: Commencing at Point 900 feet E of the SW corner of the NW1/4 of the NE1/4 of Section 29, T 13, R 19 EWM; thence 454 feet to the true point of beginning; thence N 20 feet; thence W 200 feet; thence N 434 feet; thence E 652.2 feet; thence S 15°45'; E 471 feet; thence W 540 feet to the true point of beginning. Parcel B: Beginning 900 feet E of the SW corner of the NW1/4 of Section 29, T 13N, R 19 EWM; thence E 540 feet; thence N 15°45' W 20 feet; thence S 51°15' E 758.5 feet; thence 1326 feet; more or less to the point of beginning. Parcel C; That part of Lots 1, 2, 11 and 12 of Goodwin's Five Acre Tracts, according to the plat thereof recorded in Volume A of Plats, Page 18, records of Yakima County, Washington, Described as follows: Beginning at a point 1643.7 feet E of the SW corner of the NW1/4 of the NE1/4 of Section 29, T 13N, R 19EWM, running E 323.3 feet to the W bank of the Yakima River; thence running along the W bank of said river downstream S 46°15' E 728 feet; thence running S 30° E 180.7 feet; Thence running W 939.7 feet; thence running N 660 feet to the point of beginning. Also the E half of Lot 4 and all of Lot 3 of Goodwin's Five Acre Tracks according to the plat thereof recorded in Volume A of Plats, Page 18, records of Yakima County, Washington. That portion of Lots 13, 14, 23 and 24, Goodwin's Five Acre Tracks according to the plat thereof recorded in Volume A of Plats, Page 18, records of Yakima County, Washington, lying N and E of the easterly right of way line of State Highway No.3A as acquired by condemnation under Yakima County Superior Court No. 45885. Lots 2, 10 and 11 Goodwin's Five Acre Tracks according to the plat thereof recorded in Volume A of Plats, Page 18, records of Yakima County, Washington, EXCEPT that portion of Lots 2 and 11 lying E of the W line of the property conveyed to Aea D. Holloway by instrument recorded in Volume 61 of Deeds, Page 46, records of Yakima County, Washington, described as follows: Beginning at a point 1643.7 feet E of the SW corner of the NW1/4 of the NE1/4 of Section 29, T 13N, R 19EWM, running E 323.3 feet to the W bank of the Yakima River; thence running along the W bank of said river downstream S 46°15' E 728 feet; thence running S 30° E 180.7 feet; Thence running W 939.7 feet; thence running N 660 feet to the point of beginning. EXCEPT that portion of said Lot 2 lying westerly of the easterly right of way line of Primary State Highway 3, as conveyed by deed recorded in Volume 620 of Deeds, Auditor's File No. 1881267, records of Yakima County, Washington.

PARCEL NO. 191329-11005	¼	¼ NE	SECTION 29	TOWNSHIP N. 13	RANGE, 19 EWM
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Board's Decision on the Application

MAXIMUM CUB FT/ SECOND	MAXIMUM GAL/MINUTE 118	MAXIMUM ACRE-FT/YR 83	TYPE OF USE, PERIOD OF USE Municipal Water Supply, April 1 to October 1				
SOURCE Well			TRIBUTARY OF (IF SURFACE WATER)				
AT A POINT LOCATED: PARCEL NO. 191329-11005	¼ NW	¼ NE	SECTION 29	TOWNSHIP N. 13	RANGE 19 EWM	WRIA 38	COUNTY. Yakima
AT A POINT LOCATED: PARCEL NO. 191329-11005	¼ SE	¼ NE	SECTION 29	TOWNSHIP N. 13	RANGE 19 EWM	WRIA 38	COUNTY. Yakima

LEGAL DESCRIPTION OF PROPERTY ON WHICH WATER IS TO BE USED AS APPROVED BY THE BOARD

That portion of the SE1/4 of the SE1/4 of Section 20, T.13N, R. 19EWM lying westerly of the existing Yakima River Flood Control Dike; Also, beginning 1352.5 feet E of the NW corner of the NE1/4 of Sec 29, T 13N, R 19 EWM; thence S 419.50 feet; thence 15 3/4° E 451 feet; thence S 51 1/4° E 758.5 feet to the S line of the N1/2 of the NW1/4 of said Section 29; thence E along said S line of the N1/2 of NE1/4 to the point where said line intersects with the existing Yakima River Flood Control Dike; thence Northwesterly along the W boundary of the Yakima River Flood Control Dike to the line common to Sections 20 and 29; thence westerly along said section line to the point of beginning. Parcel A: Commencing at Point 900 feet E of the SW corner of the NW1/4 of the NE1/4 of Section 29, T 13, R 19 EWM; thence 454 feet to the true point of beginning; thence N 20 feet; thence W 200 feet; thence N 434 feet; thence E 652.2 feet; thence S 15°45'; E 471 feet; thence W 540 feet to the true point of beginning. Parcel B: Beginning 900 feet E of the SW corner of the NW1/4 of Section 29, T 13N, R 19 EWM; thence E 540 feet; thence N 15°45' W 20 feet; thence S 51°15' E 758.5 feet; thence 1326 feet; more or less to the point of beginning. Parcel C; That part of Lots 1, 2, 11 and 12 of Goodwin's Five Acre Tracts, according to the plat thereof recorded in Volume A of Plats, Page 18, records of Yakima County, Washington, Described as follows: Beginning at a point 1643.7 feet E of the SW corner of the NW1/4 of the NE1/4 of Section 29, T 13N, R 19EWM, running E 323.3 feet to the W bank of the Yakima River; thence running along the W bank of said river downstream S 46°15' E 728 feet; thence running S 30° E 180.7 feet; Thence running W 939.7 feet; thence running N 660 feet to the point of beginning. Also the E half of Lot 4 and all of Lot 3 of Goodwin's Five Acre Tracks according to the plat thereof recorded in Volume A of Plats, Page 18, records of Yakima County, Washington. That portion of Lots 13, 14, 23 and 24, Goodwin's Five Acre Tracks according to the plat thereof recorded in Volume A of Plats, Page 18, records of Yakima County, Washington, lying N and E of the easterly right of way line of State Highway No.3A as acquired by condemnation under Yakima County Superior Court No. 45885. Lots 2, 10 and 11 Goodwin's Five Acre Tracks according to the plat thereof recorded in Volume A of Plats, Page 18, records of Yakima County, Washington, EXCEPT that portion of Lots 2 and 11 lying E of the W line of the property conveyed to Aea D. Holloway by instrument recorded in Volume 61 of Deeds, Page 46, records of Yakima County, Washington, described as follows: Beginning at a point 1643.7 feet E of the SW corner of the NW1/4 of the NE1/4 of Section 29, T 13N, R 19EWM, running E 323.3 feet to the W bank of the Yakima River; thence running along the W bank of said river downstream S 46°15' E 728 feet; thence running S 30° E 180.7 feet; Thence running W 939.7 feet; thence running N 660 feet to the point of beginning. EXCEPT that portion of said Lot 2 lying westerly of the easterly right of way line of Primary State Highway 3, as conveyed by deed recorded in Volume 620 of Deeds, Auditor's File No. 1881267, records of Yakima County, Washington.

PARCEL NO. 191329-11005	¼	¼ NE	SECTION 29	TOWNSHIP N. 13	RANGE, 19 EWM
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DESCRIPTION OF PROPOSED WORKS

Proposed primary source of supply is an existing well, known as the Greenway Well, 10 inches in diameter, 350 feet deep, with pump to an underground sprinkler system. Proposed alternate source of supply is a second existing well 48 inches in diameter, 28feet deep, with pump connected to the same underground sprinkler system. The proposed alternate source well is the well currently authorized under Certificate of Water Right G4-23039C, and the proposed primary source well is the additional point of withdrawal that is the subject of this application.

DEVELOPMENT SCHEDULE

BEGIN PROJECT BY THIS DATE: Begun	COMPLETE PROJECT BY THIS DATE: Complete	COMPLETE CHANGE AND PUT WATER TO FULL USE BY THIS DATE: October 1, 2012
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BACKGROUND [See WAC 173-153-130(6)(a)]

On November 4, 2010 the City of Yakima of Yakima, WA filed an application to add a point of diversion under Certificate of Water Right G4-23039C. The application was accepted at an open public meeting on November 4, 2010, and the board assigned application number YAKI-10-03.

Attributes of the water right as currently documented

Name on certificate, claim, permit: City of Yakima Department of Parks and Recreation

Water right document number: G4-23039C

As modified by certificate of change number: N/A

Priority date, first use: June 3, 1974

Water quantities: Qi: 200 GPM

Qa: 83 acre ft./ year

Source: Well

Point of diversion/withdrawal: 1250 feet west and 1200 feet south from the NE corner of Section 29 (per certificate). Note: Actual location is 1440 feet west and 1000 feet south of the NE corner of Section 29 as shown on Exhibit #2. As part of this change to add a point of diversion, the original well location should be corrected.

Purpose of use: Irrigation of 16 acres (per certificate). Note: The water right is owned by the City of Yakima and is used for governmental purposes by the City. It is therefore a municipal water supply right and will be amended when processing the subject change to correctly identify it as such (see RCW 90.03.015 and RCW 90.03.560).

Period of use: April 1 to October 1

Place of use: See legal description on Page 1.

Existing provisions: none

Tentative determination of the water right

The tentative determination is provided on the front page of this report.

History of water use

Aerial photos dated 1927, 1947, 1968, 1992, 1998, 2005, and 2008 all show active irrigation of approximately 40.5 acres or more within what is now tax parcel 191329-11005. The City of Yakima owns parcel 191329-11005, which includes both the Arboretum and a portion of the Greenway. The Arboretum and Greenway provide park, open space and recreation benefits to the citizens of Yakima. 32 acres of this parcel is currently irrigated by the Arboretum. These 32 irrigated acres transitioned from pasture to ornamental grasses/shrubs/trees between 1967 and the present. Historically the land has also produced orchard crops and vegetables. Of the 32 irrigated acres at the Arboretum, 16 acres is irrigated by this subject water right and 16 acres is irrigated by Old Union surface water rights (which are subject to a separate application for change in point of diversion for surface water right CS4-01212CTCL that is being processed by the Department of Ecology). An historical review shows no evidence of lapses in irrigation of the 32 acre Arboretum area (i.e., the area irrigated under water right G4-23039C) from 1974 to the present.

In addition to the subject water right, ground water right G4-29825 and shares of water from the Old Union Irrigation Company are available to irrigate 44.2 acres, although only 40.5 acres are actually irrigated, within tax parcel 191329-11005. The subject water right is authorized for 16 acres (Arboretum), G4-29825 is authorized for 12.2 acres (Greenway), and the Old Union Irrigation Company water shares are authorized for 16 acres (Arboretum). This is shown on Exhibit #2. The subject application is solely to add a new point of withdrawal for G4-23039C. No change in the place of use is requested and no change is proposed for G4-29825. As noted above, changes to the Old Union water right are subject to a separate change application being processed by Ecology.

Previous changes

None

SEPA

The board has reviewed the proposed project in its entirety. The quantities proposed for change are below the SEPA threshold and there are no other modifications proposed related to the water rights change. Accordingly, the application is SEPA-exempt.

Other

The information or conclusions in this section were authored and/or developed by Dave Brown and Don Schramm P.E.

COMMENT AND PROTESTS [See WAC 173-153-130(6)(b)]

Public notice of the application was given in the Yakima Herald Republic on December 2 and 8, 2010. Protest period ended on January 8, 2011.

There were no protests received during the 30 day protest period. In addition, no oral and written comments were received at an open public meeting of the board or other means as designated by the board.

The information or conclusions in this section were authored and/or developed by Dave Brown and Don Schramm P.E.

INVESTIGATION [See WAC 173-153-130(6)(c)]

The following information was obtained from a site inspection conducted by Jeff Stevens on January 27, 2011,

- Old Union transfer (surface water right CS4-01212CTCL) will be done under separate application with Ecology (not WCB).
- Ecology has indicated it does not intend to revoke the temporary permit (G4-29825) for the new well. However, Ecology has indicated it cannot make the temporary permit final nor issue a certificate.
- Old well (currently authorized point of withdrawal under subject water right -- G4-23039C) last used 6 to 8 years ago. Originally constructed in 1969. Cannot provide sufficient water to irrigate entire grounds.
- New well (authorized under G4-29825) drilled in 1989; it can provide sufficient water to irrigate entire grounds and has been used since pumping stopped from old well 6 to 8 years ago.
- Old well apparently in continuity with Yakima River. New well is cased 150+ feet into Ellensburg formation.
- There is an exempt well on the arboretum grounds that serves the house and maintenance shed. Not connected to irrigation system.

Below is an analysis of Arboretum and Greenway irrigation water peak demand and annual delivery.

The wells are not currently metered, and after an extensive search we were unable to locate the pump curve. Accordingly, historic beneficial use, both instantaneous and annual, must be estimated through peak demand and annual delivery calculations.

Peak flow was estimated by counting sprinkler heads. Based on an interview with the grounds keeper, Jeff Neal, the peak irrigation set involves 24 – 10 gpm sprinklers and 30 – 1.2 gpm sprinklers. This yields an apparent peak flow estimate of 276 gpm. Assuming the irrigation heads are worn and delivering an additional 10% increases this figure to **304 gpm** (276X1.1). The pump system is currently used to irrigate 40.5 acres (32 acres Arboretum and 8.5 acres Greenway). Averaging over the irrigation season it is estimated the peak flow is run 65% of the time (more during the hot mid-summer months and less at the beginning and end of the irrigation season). The irrigation season runs from April 1 through the end of October, 213 days. The annual volume can be calculated as follows – $((304/449) \times 2) \times (213 \times 0.65) = 187 \text{ AF}$ (**4.6 AF/acre**). This formula converts from gpm to cfs then AF/day then total AF for the season. (in the very hottest part of the summer the Arboretum may have to run 24/7, early or late in the season they may not have to run for a week. It's all demand driven. 65% is a reasonable estimate of the average for the total season.)). The subject well right is available for the time period April through September. The acres being irrigated with this well right will be surplus irrigated to carry through the remaining growing season therefore the seasonal total should be very similar to ground being irrigated through mid or late October.

As a check the annual volume was also calculated using the 2009 irrigation season power meter reading of 42,128 KW-hrs. Total head against the pump is about 135' (50 psi X 2.31 = 115' at sprinkler, water lifted approximately 10', estimate system losses of 10'). The pump efficiency is estimated at 65%. The annual volume can be calculated as follows – $(42,128 \times 0.65) / (1.023 \times 135) = 198 \text{ AF}$ (**4.9 AF/acre**).

Using WSU's "Irrigation Requirements for Washington" a conservative figure for sod and assorted trees irrigation requirement is 40" annually. Assuming a sprinkler efficiency of 75%, 10% additional leaching requirement, and 10% additional to maintain sod health due to high foot traffic yields the following annual volume estimate – $((40/12)/0.75) \times 40.5 \times 1.1 \times 1.1 = 217 \text{ AF}$ (**5.4 AF/acre**).

Based on the above, a peak flow of **300 gpm** and annual volume of **210 AF** is a reasonable good faith estimate for all **40.5 irrigated acres, which is equivalent to 7.4 gpm/acre and 5.2 AF/acre.**

Applying this information to the Arboretum 16 acres authorized for irrigation under the subject ground water right (G4-23039C) yields the following reasonable estimates for historical use:

(Instantaneous flow of 118 gpm (7.4 gpm/acre X 16 acres))

(Annual volume of 83 AF (5.2 acre feet/acre X 16 acres))

Proposed project plans and specifications

The additional point of withdrawal for this water right that is being requested in the subject application was actually installed and put into service in 1988. Therefore, no change to the current configuration or usage is contemplated. Water is pumped from this well, located in the SE ¼ NE ¼ of Section 29 Township 13 Range 19 EWM on Tax Parcel 191329-11005, into an underground sprinkler system. This system waters turf grass and ornamental plantings at the Yakima Arboretum (under the subject water right) and at the Yakima Greenway (under G4-29825). The well is owned by the Yakima Greenway, and a joint use MOA exists between the Arboretum and the Greenway. The old well, which is the currently authorized point of withdrawal under the subject water right, will be retained as an alternate point of withdrawal.

Other water rights appurtenant to the property (if applicable)

Water delivered by Old Union Irrigation Company is also used on Arboretum Property. Temporary Permit No. G4-29285 is used for irrigation the Greenway property and is connected to the joint Arboretum – Greenway underground sprinkler system. An exempt well on the Arboretum grounds serves the house and maintenance shed on the north end of the property. The City of Yakima municipal water system provides water for domestic indoor uses at the Jewett Center.

Public Interest (groundwater only)

The proposed transfer is subject to RCW 90.44.100 and therefore, cannot be detrimental to the public interest, including impacts on any watershed planning activities. The claimed use of water is for purposes allowed in areas in accordance with zoning ordinances. This change is for water previously put to beneficial uses, and supports maintenance of park, open space and recreational lands. The amount, timing and use of water will continue consistent with longstanding uses on the property. The Board therefore finds that approval of this request will not be detrimental to the public interest.

Tentative Determination

In order to make a water right change decision, the Board must make a tentative determination on the validity and extent of the right. The Board has made the tentative determination as displayed upon the first page of this report. There are several circumstances that can cause the board's tentative determination to differ from the stated extent of the water right within water right documentation. Water right documents define the maximum quantities authorized under a water right at the time of issuance, and may not accurately reflect the actual extent to which a water right has been developed and maintained through historic beneficial use. Additionally, except for a sufficient cause pursuant to RCW 90.14.140, water rights, in whole or in part, not put to a beneficial use for five consecutive years since 1967 may be subject to relinquishment under sections 90.14.130 through 90.14.180 RCW. Water rights may additionally be lost through abandonment. The Board's tentative determination was based upon the following findings:

- (1) The water right is in good standing as evidenced in the Board's review of documents and evidence of use as observed during site visit.
- (2) The water right is owned by the City of Yakima and is used for governmental purposes by the City (i.e., irrigation of City-owned park and open-space lands). It is therefore a municipal water supply right as defined under RCW 90.03.015, and should be amended when processing the subject change to correctly identify it as a municipal right as required by RCW 90.03.560.
- (3) The Arboretum has used the water consistently for irrigation of 16 acres of the Arboretum since the water right's issuance in 1974.
- (4) The Board has determined that the Arboretum has consistently beneficially used the full 83 acre feet, therefore the 83 acre feet is in good standing.
- (5) The Board has determined that the Arboretum has consistently beneficially used 118 gallons per minute of the authorized 200 gpm, therefore the 118 gpm is in good standing.

The amount of 118 gallons per minute, 83 acre-feet per year is valid and suitable for addition of the new point of withdrawal as described herein.

Geologic, Hydrogeologic, or other scientific investigations (if applicable)

The currently authorized point of withdrawal pumps from the alluvial aquifer and the proposed additional point of withdrawal pumps from the Upper Ellensburg Aquifer. Technical assistance provided by Ecology indicated that these two pumping points will be treated as the same body of groundwater. The Board therefore determines that the two points of withdrawal are located within in the same body of public groundwater.

Other

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CONCLUSIONS [See WAC 173-153-130(6)(d)]

Tentative determination (validity and extent of the right)

The Board has determined that a valid municipal water supply right exists in the quantities of 118 gallons per minute and 83 acre-feet per year for irrigation of 16 acres from April 1 to October 1.

Relinquishment or abandonment concerns

The Water Board did not encounter any evidence of relinquishment or abandonment of the subject Certificate during its review.

Hydraulic analysis

The Board determines that both the currently authorized point of withdrawal and the proposed additional point of withdrawal are located in the same body of public groundwater.

Consideration of comments and protests

No protests or comments were submitted on the subject application.

Impairment

This impairment analysis is based on actual pumping, proximity of the two points of withdrawal and absence of comments or protests. The additional point of withdrawal requested under the subject change application was actually installed and put into service in 1988, some 23 years ago. This water right has been fully used in all of those 23 years. As noted above, the two points

of withdrawal are located in very close proximity to one another. The Board is not aware of any complaints of impairment at nearby wells, including those at the Animal Shelter or at Nob Hill Wrecking Yard. Nor is the Board aware of any impairment issues in any of the other 63 wells within 1,000 feet. Finally, no comments or protests regarding impairment or any other concerns have been submitted in regard to the subject change. The Board therefore determines that approving the requested additional point of withdrawal will not result in impairment of any existing rights.

Enlargement

The Board will condition the approval to limit the total quantity of water withdrawn from the two points of withdrawal to the quantity available under the subject water right. Accordingly, approval of the additional point of withdrawal will not enlarge the existing water right.

Public Interest

The proposed transfer is subject to RCW 90.44.100 and therefore cannot be detrimental to the public interest, including impacts on any watershed planning activities. The Board has determined that approval of the requested change will not be detrimental to the public interest.

Other

The board also considered the previous provisions associated with the water right as identified in the background and investigation sections of this report when making its decision.

DECISION [See WAC 173-153-130(6)(e)]

The Yakima County Water Conservancy Board decision is to conditionally approve the requested change proposal as fully describe as follows:

1. The quantification of beneficial use and quantities available for change are: 118 gallons per minute and 83 acre-feet per year for municipal water supply purposes (i.e., irrigation of 16 acres of City-owned land) from April 1 to October 1, which quantities may be withdrawn from the Greenway Well or from the well identified on the original certificate – either alone or in tandem.
2. The Point of Withdrawal of the Greenway Well is at SE ¼ of NE ¼ of Section 29, Township 13 N., Range 19 E. W. M., YAKIMA COUNTY, is added as an alternate Point of Withdrawal
3. The existing well, which is located at NW ¼ of NE ¼ of Section 29, Township 13 N., Range 19 E.W.M., YAKIMA COUNTY, will continue to serve as an alternate Point of Withdrawal.
4. The Place of Use is not changed; the Place of Use shall be described as follows:

That portion of the SE1/4 of the SE1/4 of Section 20, T.13N, R. 19EWM lying westerly of the existing Yakima River Flood Control Dike; Also, beginning 1352.5 feet E of the NW corner of the NE1/4 of Sec 29, T 13N, R 19 EWM; thence S 419.50 feet; thence 15 3/4° E 451 feet; thence S 51 1/4° E 758.5 feet to the S line of the N1/2 of the NW1/4 of said Section 29; thence E along said S line of the N1/2 of NE1/4 to the point where said line intersects with the existing Yakima River Flood Control Dike; thence Northwesterly along the W boundary of the Yakima River Flood Control Dike to the line common to Sections 20 and 29; thence westerly along said section line to the point of beginning. Parcel A: Commencing at Point 900 feet E of the SW corner of the NW1/4 of the NE1/4 of Section 29, T 13, R 19 EWM; thence 454 feet to the true point of beginning; thence N 20 feet; thence W 200 feet; thence N 434 feet; thence E 652.2 feet; thence S 15°45'; E 471 feet; thence W 540 feet to the true point of beginning. Parcel B: Beginning 900 feet E of the SW corner of the NW1/4 of Section 29, T 13N, R 19 EWM; thence E 540 feet; thence N 15°45' W 20 feet; thence S 51°15' E 758.5 feet; thence 1326 feet; more or less to the point of beginning. Parcel C; That part of Lots 1, 2, 11 and 12 of Goodwin's Five Acre Tracts, according to the plat thereof recorded in Volume A of Plats, Page 18, records of Yakima County, Washington, Described as follows: Beginning at a point 1643.7 feet E of the SW corner of the NW1/4 of the NE1/4 of Section 29, T 13N, R 19EWM, running E 323.3 feet to the W bank of the Yakima River; thence running along the W bank of said river downstream S 46°15' E 728 feet; thence running S 30° E 180.7 feet; Thence running W 939.7 feet; thence running N 660 feet to the point of beginning. Also the E half of Lot 4 and all of Lot 3 of Goodwin's Five Acre Tracts according to the plat thereof recorded in Volume A of Plats, Page 18, records of Yakima County, Washington. That portion of Lots 13, 14, 23 and 24, Goodwin's Five Acre Tracts according to the plat thereof recorded in Volume A of Plats, Page 18, records of Yakima County, Washington, lying N and E of the easterly right of way line of State Highway No.3A as acquired by condemnation under Yakima County Superior Court No. 45885. Lots 2, 10 and 11 Goodwin's Five Acre Tracts according to the plat thereof recorded in Volume A of Plats, Page 18, records of Yakima County, Washington, EXCEPT that portion of Lots 2 and 11 lying E of the W line of the property conveyed to Aea D. Holloway by instrument recorded in Volume 61 of Deeds, Page 46, records of Yakima County, Washington, described as follows: Beginning at a point 1643.7 feet E of the SW corner of the NW1/4 of the NE1/4 of Section 29, T 13N, R 19EWM, running E 323.3 feet to the W bank of the Yakima River; thence running along the W bank of said river downstream S 46°15' E 728 feet; thence running S 30° E 180.7 feet; Thence running W 939.7 feet; thence running N 660 feet to the point of beginning. EXCEPT that portion of said Lot 2 lying westerly of the easterly right of way line of Primary State Highway 3, as conveyed by deed recorded in Volume 620 of Deeds, Auditor's File No. 1881267, records of Yakima County, Washington.

5. In conditionally approving the subject applications, the Water Board must by statute advise the applicant that they are not permitted to proceed to effect the proposed change until a final decision is made by the Director of the Department of Ecology.

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PROVISIONS [See WAC 173-153-130(6)(f)]

Conditions and limitations

FOR ALL WATER RIGHTS BEING CHANGED:

1. Installation and maintenance of an access port as described in Ground Water Bulletin No. 1 is required. An air line and gage may be installed in addition to the access port.
2. All water wells constructed within the state shall meet the minimum standards for construction and maintenance as provided under Chapter 18.104 RCW (Washington Water Well Construction Act of 1971) and Chapter 173-160 WAC (Minimum Standards for Construction and Maintenance of Water Wells).
3. An approved measuring device shall be installed and maintained for the source(s) identified herein in accordance with the rule "Requirements for Measuring and Reporting Water Use", Chapter 173-173 WAC. Water use data shall be recorded weekly and shall be submitted annually to Ecology by January 31st of each calendar year typically.
4. The rule above describes the requirements for data accuracy, device installation and operation, and information reporting. It also allows a water user to petition Ecology for modifications to some of the requirements. Installation, operation and maintenance requirements are enclosed or available from Ecology as a document entitled "Water Measurement Device Installation and Operation Requirements".
5. At a minimum, the following information shall be included with each submittal of water use data: owner, contact name if different, mailing address, daytime phone number, WRIA, Permit or Certificate No., source name, annual quantity used including units, maximum rate of diversion including units, period of use, monthly meter readings including units, and peak flow including units for each month. In the future, Ecology may require additional parameters to be reported or more frequent reporting.
6. Ecology prefers web based data entry, but does accept hard copies. Ecology will provide forms and electronic data entry information.
7. Department of Ecology personnel, upon presentation of proper credentials, shall have access at reasonable times, to the records of water use that are kept to meet the above conditions, and to inspect at reasonable times any measuring device used to meet the above conditions, but only to the extent otherwise allowed by law.
8. Because the subject water right is not currently included in the City of Yakima's water system plan, the place of use will not be subject to the use boundaries changing as a result of any domestic water service boundary change.

Mitigation (if applicable)

None

Construction Schedule

The additional point of withdrawal was actually installed and put into service approximately 23 years ago and the water has already been put to full beneficial use through the new point of withdrawal. This regulatory change authorization is to memorialize that physical change. The only activity required before a superseding certificate can be issued is installation of the measuring devices required above, which shall be completed by October 1, 2012.

Other

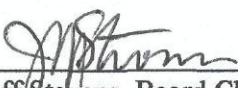
The total quantities withdrawn from the two alternate points of withdrawal combined cannot exceed 118 gpm at any given time, or 83 acre feet in any given year.

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The undersigned board commissioner certifies that he/she understands the board is responsible "to ensure that all relevant issues identified during its evaluation of the application, or which are raised by any commenting party during the board's evaluation process, are thoroughly evaluated and discussed in the board's deliberations. These discussions must be fully documented in the report of examination." [WAC 173-153-130(5)] The undersigned therefore, certifies that he/she, having reviewed the report of examination, knows and understands the content of this report and concurs with the report's conclusions.

Signed at Yakima, Washington

This 7 day of 7, 2011



Jeff Stevens, Board Chair
Yakima County Water Conservancy Board